4. (6 points) Find the *exact* equation of the linear approximation to the curve \( f(x) = 10e^{0.4x} \) having slope equal to 2.

5. (10 points) Find the *exact* coordinates of the point \((x, y)\) where the tangent line to the graph of

\[
y^3 - xy = -6
\]

is vertical. You should start by differentiating the equation above implicitly with respect to \(x\).
Show step-by-step work.